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ABSTRACT OF THE DISCLOSURE

An apparatus for grinding a magnetic member comprises a cutting blade having a cutting edge including heat resistant resin and abrasive grain. A magnetic member including a rare-earth alloy is ground by the cutting blade while grinding fluid primarily made of water is supplied to a grinding region. A magnet separator having a surface magnetic flux density not smaller than 0.25 T magnetically separates sludge from used grinding fluid. Further, the grinding fluid is introduced into a tank, where the sludge contained in the grinding fluid is allowed to coagulate and sediment. The grinding fluid separated from the sludge is used in circulation. The same separation process can be used for separation of sludge containing a rare-earth alloy from waste fluid.